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Intelligent Decision Support Systems for Federal Criminal Sentencing: Using Crowdsourcing for Social Justice

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Federal sentencing guidelines have been used since 1987. Their goal was to provide more uniformity and reduce inter-judge disparity (Breyer 1988). While the goal was somewhat achieved, unintended consequences has proliferated, for instance, prison overcrowding due to the "tough on crime" approach, lack of recognition for rehabilitation efforts, and disparity when it comes to demographic characteristics of the offenders (Steffensmeier et al. 2017). Intelligence decision support systems (IDSS) have been widely used to solve complex issues as they are able to quickly analyze large datasets and make predictions based on prior decisions (Bonczek et al. 2014). However, when integrating this novel technology to the criminal justice system, the forethought of how ethical considerations related to using an algorithm to make decisions affecting someone's life and freedom are lacking. The biggest concern is how to train IDSS to make ethical and fair decisions and not reinforce the existing bias in the system (Osoba and Welser IV 2017).

The contributions of this study are twofold. First, there are implications for practice as we will use our findings to propose additional criteria for a more equal and fair sentencing algorithm design. We will expand the existing federal sentencing guidelines and will take into account crowdsourcing as a way to balance the outcomes and improve the diversity in the justice system. Second, we will measure the public perceptions when it comes to fairness and equality in the US amidst the new civil rights movement. This measurement will allow us to uncover to what extent the sentencing guidelines have affected society. We will use a validated survey instrument that will allow us to explore long-term trends and patterns. Reforming the US criminal justice system is a daunting task. Thus, taking a comprehensive approach and relying on a solid theoretical foundation is critical so that others can build upon and continue this important research in the future. Shedding more light on this problem from an information systems (IS) perspective is critical and demonstrates that more collaborative and transdisciplinary work is needed to make a broader societal impact.

References

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